

Name: \_\_\_\_\_ TP: \_\_\_\_\_

Performance Event #1 Rubric  
Geometry  
Due Date: Monday, October 28<sup>th</sup>

<b>Assignment Summary:</b>	<p>Many scholars struggle in math because we want the quick answer. We do not want to have to read, write, or think in math class. The need for engineers, computer scientists, and mathematicians is at its highest as our world demands people who can innovate, and develop new technologies to keep up with the global economy. The goal of math is to improve our ability to come up with a plan of attack for complex problems that require an incredibly high level of thinking. The glory of math is that there is often more than one plan of attack that will lead us to the correct solution. Our attempt to push you to think at a high level is to develop you as patient “plan-of-attackers” via GRASP rather than impatient “quick answer-finders.” This performance event will push you to critique some of your fellow 2016s GRASPing abilities in attempt to push the entire class of 2016 to become the next generation of engineers, computer scientists, and mathematicians.</p> <p><b>Paragraph 1:</b></p> <ul style="list-style-type: none"> <li>• Introduction – WHY are your Geometry teachers pushing you to GRASP? What is the purpose of GRASP? How has GRASP improved your ability to solve complex math problems?</li> </ul> <p><b>Paragraph 2:</b></p> <ul style="list-style-type: none"> <li>• Quiz 5 Grade Explanation – Using the language of the rubric, explain <i>specifically</i> why the 2016 scholar earned the grade that he/she did on EVERY rubric row. Use <i>specific</i> evidence from their GRASP assignment to back up your grade. Explain how he/she could have improved his/her grade.</li> </ul> <p><b>Paragraph 3:</b></p> <ul style="list-style-type: none"> <li>• HW 16 Grade Explanation – Using the language of the rubric, explain <i>specifically</i> why the 2016 scholar earned the grade that he/she did on EVERY rubric row. Use <i>specific</i> evidence from their GRASP assignment to back up your grade. Explain how he/she could have improved his/her grade.</li> </ul> <p><b>Paragraph 4:</b></p> <ul style="list-style-type: none"> <li>• Conclusion – How do your own GRASPing abilities compare to the GRASP assignments you just graded? Do you like GRASP? What do you need to do to step your GRASP game up? How can your Geometry teachers help you improve your GRASPing abilities?</li> </ul>		
<b>Mission:</b>	<p>Your mission is two-fold:</p> <ol style="list-style-type: none"> <li>1) Grade two of your peer’s GRASP assignments using the GRASP rubric.</li> <li>2) Write an explanation as to why you gave your peer the grade you did for each part of GRASP to ensure that the class of 2016 knows how to break down complex problems at a HIGH level of quality.</li> </ol>		
<b>Audience:</b>	<p>A 2016 scholar (you can pick someone, make up a name, or use “2016 scholar”).</p>		
<b>Format:</b>	<table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>• <b><u>Typed, 1-inch margins, double spaced</u></b></li> <li>• No excessive spacing of lines or margins</li> <li>• MLA format heading</li> <li>• Minimum length: 800 words (just over 2 pages – inadequate length will result in a 1-letter-grade drop – <b><u>include word count</u></b>)</li> </ul> </td><td> <ul style="list-style-type: none"> <li>• Include your own creative title</li> <li>• Staple in the following order: Assignment sheet, Quiz 5, Quiz 5 rubric, HW 16, HW 16 rubric, and final draft of paper.</li> <li>• Indent the beginning of each paragraph</li> <li>• <b><u>– 0.5 points for every error in this section</u></b></li> </ul> </td></tr> </table>	<ul style="list-style-type: none"> <li>• <b><u>Typed, 1-inch margins, double spaced</u></b></li> <li>• No excessive spacing of lines or margins</li> <li>• MLA format heading</li> <li>• Minimum length: 800 words (just over 2 pages – inadequate length will result in a 1-letter-grade drop – <b><u>include word count</u></b>)</li> </ul>	<ul style="list-style-type: none"> <li>• Include your own creative title</li> <li>• Staple in the following order: Assignment sheet, Quiz 5, Quiz 5 rubric, HW 16, HW 16 rubric, and final draft of paper.</li> <li>• Indent the beginning of each paragraph</li> <li>• <b><u>– 0.5 points for every error in this section</u></b></li> </ul>
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<b>Procedure:</b>	<ol style="list-style-type: none"> <li>1. Write paragraph 1 – your introduction (see assignment summary above for what to include)</li> <li>2. Read GRASP rubric</li> <li>3. Grade Quiz 5, circling where in the rubric the 2016 scholar has scored in each row</li> <li>4. Write paragraph 2 (see assignment summary above for what to include)</li> <li>5. Grade HW 16, circling where in the rubric the 2016 scholar has scored in each row</li> <li>6. Write paragraph 3 (see assignment summary above for what to include)</li> <li>7. Write paragraph 4 – your conclusion (see assignment summary above for what to include)</li> <li>8. Self-edit</li> <li>9. Make revisions based on editing</li> <li>10. Proofread</li> <li>11. Print final draft</li> </ol>		



# Rubric

	Exceeding	Meeting	Approaching	Baseline	Unacceptable	Points
<b>Accuracy of Quiz 5 Grade</b>	Student accurately grades Quiz 5 per the GRASP rubric 10	Student is 1 point off of accurately grading Quiz 5 per the GRASP rubric 8	Student is 2 points off of accurately grading Quiz 5 per the GRASP rubric 6	Student is 3 points off of accurately grading Quiz 5 per the GRASP rubric 4	Student is more than 3 points off of accurately grading Quiz 5 per the GRASP rubric OR does not grade Quiz 5 0	— / 20
<b>Accuracy of HW 16 Grade</b>	Student accurately grades HW 16 per the GRASP rubric 10	Student is 1 point off of accurately grading HW 16 per the GRASP rubric 8	Student is 2 points off of accurately grading HW 16 per the GRASP rubric 6	Student is 3 points off of accurately grading HW 16 per the GRASP rubric 4	Student is more than 3 points off of accurately grading HW 16 per the GRASP rubric OR does not grade HW 16 0	— / 20
<b>Introduction &amp; Conclusion (para. 1 &amp; 4)</b>	Student clearly articulates responses to all introduction and conclusion prompts listed in the assignment summary 20	Student missing 1 response to the introduction and conclusion prompts listed in the assignment summary 16	Student missing 2 responses to the introduction and conclusion prompts listed in the assignment summary 14	Student missing 3 responses to the introduction and conclusion prompts listed in the assignment summary OR fails to include either the introduction or conclusion 12	Student missing more than 3 responses to the introduction and conclusion prompts listed in the assignment summary OR fails to include introduction and conclusion 0	— / 20
<b>Quiz 5 Explanation (paragraph 2)</b>	Student clearly articulates rationale for why grade was assigned on EVERY GRASP rubric row AND uses specific evidence from the scholar's GRASP assignment to justify EVERY rubric row grade 20	Student missing rationale (or rationale incorrect) for 1 rubric row OR missing specific evidence from the scholar's GRASP assignment to justify 1 rubric row grade 16	Student missing rationale (or rationale incorrect) for 2 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 2 rubric row grades 14	Student missing rationale (or rationale incorrect) for 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 3 rubric row grades 12	Student missing rationale (or rationale incorrect) for more than 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify more than 3 rubric row grades 0	— / 20
<b>HW 16 Explanation (paragraph 3)</b>	Student clearly articulates rationale for why grade was assigned on each GRASP rubric row AND uses specific evidence from the scholar's GRASP assignment to back up why the grade was assigned. 20	Student missing rationale (or rationale incorrect) for 1 rubric row OR missing specific evidence from the scholar's GRASP assignment to justify 1 rubric row grade 16	Student missing rationale (or rationale incorrect) for 2 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 2 rubric row grades 14	Student missing rationale (or rationale incorrect) for 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 3 rubric row grades 12	Student missing rationale (or rationale incorrect) for more than 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify more than 3 rubric row grades 0	— / 20
<b>Writing Expectations</b>	No spelling errors and no capitalization errors 20	1 – 2 spelling errors and/or 1 – 2 capitalization errors 16	3 – 4 spelling errors and/or 3 – 4 capitalization errors 14	5 – 6 spelling errors and/or 5 – 6 capitalization errors. 12	More than 6 spelling errors and/or more than 6 capitalization errors. 0	— / 20
<b>Total: _____ / 100</b>						

Name: \_\_\_\_\_ TP: \_\_\_\_\_

**Directions:** It is time to analyze the class of 2016 GRRRRRASPING abilities! Using the attached GRASP assignments that some of your peers completed, determine *why* they earned the score that they did using the rubrics below.

Performance Event #1  
Geometry  
**Quiz 5 GRASP Rubric**  
Due Date: Monday, October 28th

	3	2	1	0	Points
<b>Goal</b>	--	Goal(s) is correct <b>and</b> written in a complete sentence.	Goal(s) is correct <b>or</b> written in a complete sentence.	Goal is incorrect <b>and</b> not written in a complete sentence.	
<b>Required</b>	All required information is listed <b>and</b> includes discrete information (e.g., formulas, unnamed angle relationships).	Missing one piece of required information <b>or</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	Missing one piece of required information <b>and</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	Missing two or more pieces of required information <b>and</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	
<b>Analysis</b>	Method to solve the problem is accurate, specific, <b>and</b> written in complete sentences.	Method to solve the problem is mostly accurate, (i.e., missing one step), <b>and</b> written in complete sentences.	Method to solve the problem is mostly inaccurate (i.e., missing two steps), <b>and</b> is written in complete sentences.	Method to solve the problem is inaccurate (missing three steps or more) <b>and</b> is not written in complete sentences.	
<b>Solve</b>	All steps to solving the problem are followed in an organized fashion according to the analysis, <b>and</b> are accurate.	All steps to solving the problem are followed in an organized fashion according to the analysis, <b>but</b> one calculation or step is incorrect, which leads to an incorrect final answer.	The plan in the analysis was followed; however, the inaccurate analysis led to an inaccurate answer.	The problem is not completely solved <b>or</b> is solved inaccurately.	
<b>Paraphrase</b>	Proof is provided in words and numbers by accurately showing that the answer is correct (e.g., substitutes values back into original equations, graphs coordinates to show the midpoint is equidistant from two endpoints)	A plan is provided that would in reality prove that the answer is correct; however, the plan is not fully carried out (e.g., writes to plot the points and show the midpoint is in the middle; however, does not actually show the points plotted).	Proof is provided in words and numbers <b>but</b> does not in actuality prove that the answer is correct (e.g., writes to substitute in width and length; however the sum does not equal the total perimeter given in the original problem).	Proof is not provided <b>or</b> proof that is provided is incorrect.	
Total: ____ / 14					

STAY READY



Name: \_\_\_\_\_ TP: \_\_\_\_\_

Performance Event #1  
Geometry

**HW 16 GRASP Rubric**

Due Date: Monday, October 28<sup>th</sup>

**Directions:** It is time to analyze the class of 2016 GRRRRRASPING abilities! Using the attached GRASP assignments that some of your peers completed, determine *why* they earned the score that they did using the rubrics below.

	3	2	1	0	Points
<b>Goal</b>	--	Goal(s) is correct <b>and</b> written in a complete sentence.	Goal(s) is correct <b>or</b> written in a complete sentence.	Goal is incorrect <b>and</b> not written in a complete sentence.	
<b>Required</b>	All required information is listed <b>and</b> includes discrete information (e.g., formulas, unnamed angle relationships).	Missing one piece of required information <b>or</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	Missing one piece of required information <b>and</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	Missing two or more pieces of required information <b>and</b> fails to include discrete information (e.g., formulas, unnamed angle relationships).	
<b>Analysis</b>	Method to solve the problem is accurate, specific, <b>and</b> written in complete sentences.	Method to solve the problem is mostly accurate, (i.e., missing one step), <b>and</b> written in complete sentences.	Method to solve the problem is mostly inaccurate (i.e., missing two steps), <b>and</b> is written in complete sentences.	Method to solve the problem is inaccurate (missing three steps or more) <b>and</b> is not written in complete sentences.	
<b>Solve</b>	All steps to solving the problem are followed in an organized fashion according to the analysis, <b>and</b> are accurate.	All steps to solving the problem are followed in an organized fashion according to the analysis, <b>but</b> one calculation or step is incorrect, which leads to an incorrect final answer.	The plan in the analysis was followed; however, the inaccurate analysis led to an inaccurate answer.	The problem is not completely solved <b>or</b> is solved inaccurately.	
<b>Paraphrase</b>	Proof is provided in words and numbers by accurately showing that the answer is correct (e.g., substitutes values back into original equations, graphs coordinates to show the midpoint is equidistant from two endpoints)	A plan is provided that would in reality prove that the answer is correct; however, the plan is not fully carried out (e.g., writes to plot the points and show the midpoint is in the middle; however, does not actually show the points plotted).	Proof is provided in words and numbers <b>but</b> does not in actuality prove that the answer is correct (e.g., writes to substitute in width and length; however the sum does not equal the total perimeter given in the original problem).	Proof is not provided <b>or</b> proof that is provided is incorrect.	

Total: \_\_\_\_ / 14

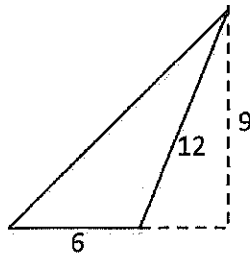
**STAY READY**

6. Use the problem below to answer questions a - b.

$$\text{Area} = \frac{1}{2} \cdot b \cdot h$$

$$\text{Area} = \frac{1}{2} \cdot 6 \cdot 12$$

$$\text{Area} = 36$$



a) Explain the mistake made in solving for the area of the triangle. Be specific (vocabulary can earn bonus pts!).

The mistake was that the student confused the height of the triangle with the measurement of the side of the triangle that is not needed to find the area.

b) Correct the mistake and box the correct area.

$$A = \frac{1}{2} b h$$

$$A = \frac{1}{2} (6) (9)$$

$$A = 27 \text{ units}$$

1.5/2

7. The width of a rectangle is three times the length. If the perimeter is 108, a) find the length and the width of the rectangle and b) find the area of the rectangle.

**G** Our goal is to find the length and the width of the rectangle. Our goal is to also find the area of the rectangle. (+)

**R** We are given:  $a = \frac{1}{2} L W$   
 $W = 3L$   
 $P = 108$

**A** ① First, I need to draw a picture which will give me a visual on the measurements of each side. ② Next, I will need to make an expression adding each side together to equal 108. ③ Then, I will need to solve for L. Then, I will substitute for L to find the width. Then, I will multiply length & width to find area. (+)

**S** ① ②  $3L + 3L + L + L = 108$   
 $6L + 2L = 108$   
 $8L = 108$   
 $L = 13.5$

$$L = 13.5 \quad (+)$$

$$W = 40.5 \quad (+)$$

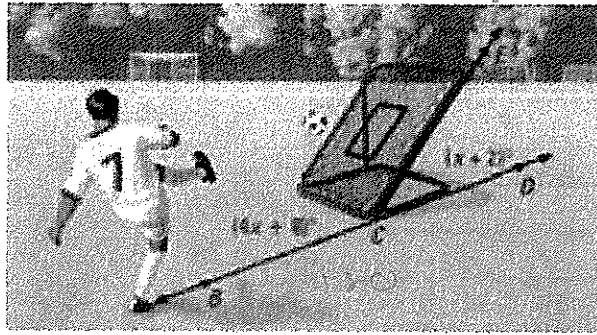
$$13.5(40.5) = 546.75 \quad (+)$$

$$A = 546.75 \quad (+)$$

**P** The width of the rectangle is 40.5. The length of the rectangle is 13.5. The area of the rectangle is 546.75. I know this b/c (+) if I add up  $13.5 + 13.5 + 40.5 + 40.5$ , it will give me a sum of 108 which was the perimeter that was given to me. If I multiply,  $13.5(40.5)$ , I will get 54.75 which is the area.

# HOMWORK 16

**SPORTS** When viewed from the side, the frame of a ball-return net forms a pair of supplementary angles with the ground. Find  $m\angle BCE$  and  $m\angle ECD$ .



## Solution

The angle to the left says  $(4x + 8)$  degrees. The angle to the left says  $(x + 2)$  degrees.

G	R	A	S	P
the goal in this question is to find $x$	The two angles and that $BCE$ marks $180$	First add like terms = it $180$ then divide to isolate $x$ .	$4x + 8 + 2 + x = 180$ $5x + 10 = 180$ $-10 \quad -10$ <hr/> $5x = 170$ $\div 5 \quad \div 5$ $x = 34$	First I put $4x + 8 + 2 + x = 180$ and divide by 5 and I get $x = 34$

Two angles form a linear pair. The measure of one angle is six more than twice the measure of the other angle. Find the measure of each angle.

G	R	A	S	P
is to find out what the angle is	$6x + 2x = 180$ <p>and then subtract to get other angle and then the angle adds up to <math>180^\circ</math></p>	First I will set $6x + 2x = 180$ then subtract and to get the other angle	$6x + 2x = 180$ $8x = 180$ <hr/> $x = 22.5$ $180 - 87 = 93$ $x = 93$	I know this is right b/c my answers add up to $180$

**STAY READY...**